

## INTERNATIONAL SEARCH REPORT

Inte rnational Application No  
PCT/JP2004/015772

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 F02N11/08

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 F02N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/140881 A1 (MAKAJIMA HIROYUKI ET AL) 31 July 2003 (2003-07-31) paragraph '0088!; figures 9-11,14	1,3-7, 9-11
X	EP 1 233 175 A (MITSUBA CORP) 21 August 2002 (2002-08-21) paragraphs '0064!, '0068!; figures 6,7,9,10,13	1,3-7, 9-11
X	PATENT ABSTRACTS OF JAPAN vol. 2002, no. 06, 4 June 2002 (2002-06-04) & JP 2002 061554 A (HONDA MOTOR CO LTD), 28 February 2002 (2002-02-28) cited in the application abstract	1,3-7, 9-11
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
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- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
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Date of the actual completion of the international search

7 January 2005

Date of mailing of the international search report

19/01/2005

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	FR 2 688 548 A (DURANTON ANDRE) 17 September 1993 (1993-09-17) page 2, line 32 - page 3, line 2; figure 1 -----	1,7

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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